Hogan & Hartson 81880.0143 Shigenobu NAKAMURA Multi-Layer Piezoelectric Element EV 667 730 952 US 7 Drawing Sheets; Sheet 1 of 7

Fig. 1A

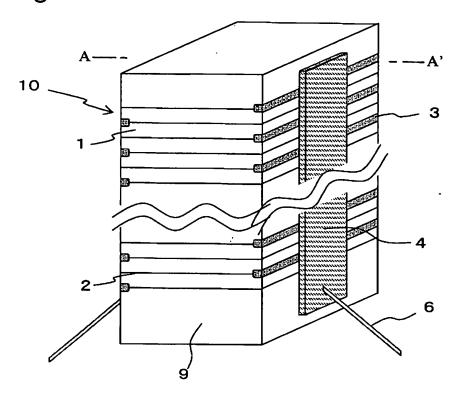
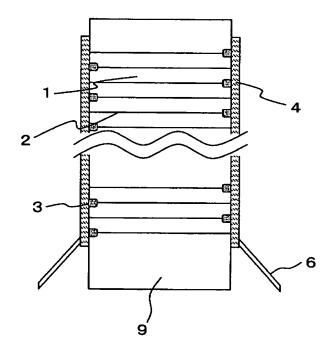


Fig. 1B



Hogan & Hartson 81880.0143 Shigenobu NAKAMURA Multi-Layer Piezoelectric Element EV 667 730 952 US 7 Drawing Sheets; Sheet 2 of 7

Fig. 2A

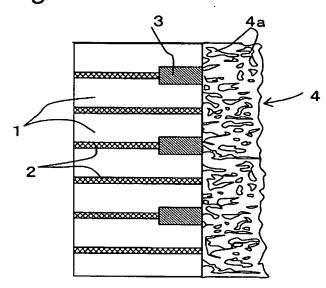
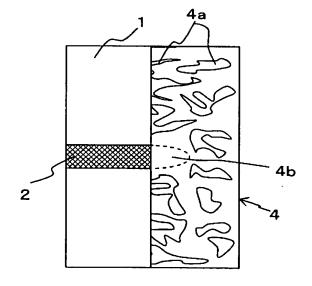


Fig. 2B



Hogan & Hartson 81880.0143 Shigenobu NAKAMURA Multi-Layer Piezoelectric Element EV 667 730 952 US 7 Drawing Sheets; Sheet 3 of 7

Fig. 2C

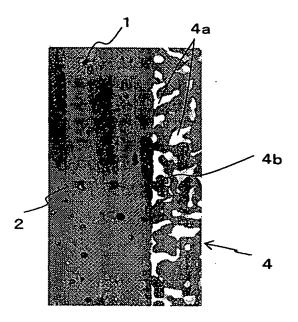
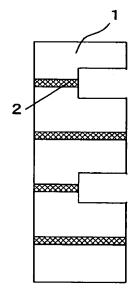


Fig. 3A



Hogan & Hartson 81880.0143 Shigenobu NAKAMURA Multi-Layer Piezoelectric Element EV 667 730 952 US 7 Drawing Sheets; Sheet 4 of 7

Fig. 3B

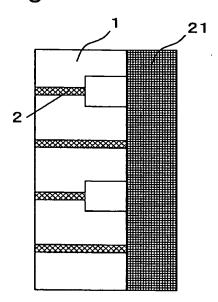
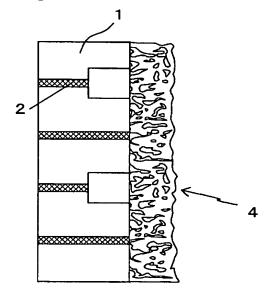


Fig. 3C



Hogan & Hartson 81880.0143 Shigenobu NAKAMURA Multi-Layer Piezoelectric Element EV 667 730 952 US 7 Drawing Sheets; Sheet 5 of 7

Fig. 4A

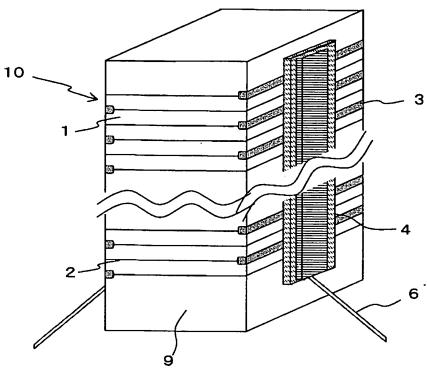
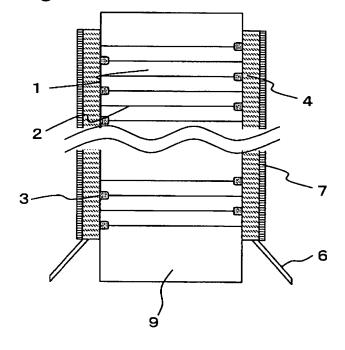


Fig. 4B



Hogan & Hartson 81880.0143 Shigenobu NAKAMURA Multi-Layer Piezoelectric Element EV 667 730 952 US 7 Drawing Sheets; Sheet 6 of 7

Fig. 4C

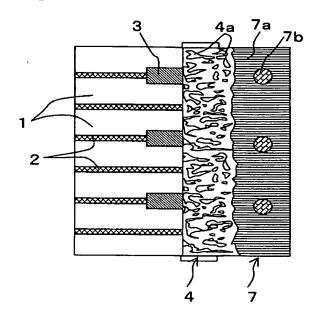
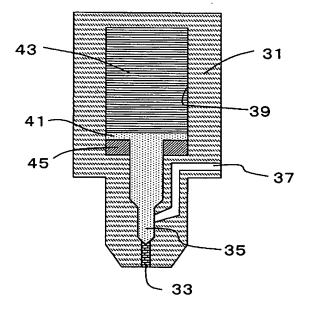


Fig. 5



Hogan & Hartson 81880.0143 Shigenobu NAKAMURA Multi-Layer Piezoelectric Element EV 667 730 952 US 7 Drawing Sheets; Sheet 7 of 7

Fig. 6

53

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61

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Fig. 7

